



The glowworm



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Bug and Plant Camp 2010 Dates Set

This year we will continue to hold bug camp on campus and the dates are **June 13 - June 17**. Check-in will begin at the dorm at 9:30am and you are on your own for lunch. At 1:00pm camp will begin at the Clay Lyle Entomology Building. We are continuing to do registration online and the spaces are limited so register early. The registration page is on the Wildlife Fisheries and Aquaculture site at http://www.cfr.msstate.edu/wildlife/conservation_camp/

We are getting some calls, and two campers and one staff have asked if we will be collecting at the Noxubee National Wildlife Refuge again and I find this pretty interesting. Yes, we have permission to collect on the NNWR this summer; I have already cleared it with Mr. Sansing, the refuge manager. What is particularly delightful is that our campers have associating good collecting with a National Wildlife Refuge and that is what you would hope for and expect on a wildlife refuge.

I had an exciting meeting with three Mississippi State Department of Health entomologists and it looks like we might have an incredible forensics activity to add to the camp agenda!!!!

The schedule is progressing nicely and as soon as I finish it and run it by our entomologist I will send it out in a Gloworm. If you have a favorite activity now would be a good time to mention it to me - jguyton@cfr.msstate.edu.

An Entomological Youtube, you will enjoy seeing!

Dr Brown posted this the other night and it is excellent.
<http://www.youtube.com/watch?v=OkhrPoZAgJs>

2009 Bug and Plant Camp a Huge Success

We adopted a prairie theme for last year's camp and were very pleased with the results. For years we searched for the insect-plant activity that would help us better communicate the

connection between insects and plants and the insects hikes were amazingly successful. Working with Drs. Lelia Kelly, Joy Anderson, Renee Clary and Charlie Wax we connected the climatic influences that resulted in the creation and sustaining of prairies, prairie soils and consequential plants with insect communities. We collected in the blackbelt prairie in Osborn and the created, Morgan Hill Prairie at the Noxubee National Wildlife Refuge.

BugFest at the Crosby Arboretum

We could not have taken care of the 500 people who participated in this year's BugFest without our young entomologist helpers from Bug Camp - You guys were GREAT!!!! To name a few Pat and Peter Drackett, Karen Benson, Matthew Thorn, Dr. Bill and Andrew Sanford and Lauren Grotz. Blair Sampson, who helped us with camp a few years ago also turned out to help. We were sad that D.J. and the Pearl River bunch were under the weather because last year their help was incredible!

Bugs Night Out at the Grand Bay National Estuarine Research Reserve

The week after BugFest we collected at the Grand Bay NERR in Moss Point and had a great time in spite of the mud! Bug campers Dr. Bill and Andrew Sanford, Pat Drackett joined Dr. Richard Brown and one of his major professors and me for that event.

Jewel Beetles to Pilot Heat Seeking Missiles

The thought of jewel beetles flying heat seeking missiles brought back images of Slim Pickens sitting on an atomic bomb while trying to release the stuck bomb bay doors on his B-52. As the bomb bay doors opened Slim, who had paused to celebrate his accomplishment with a little hootin' and hollerin', suddenly found himself riding the bomb! Accepting the inevitable in fine rodeo fashion we watched him fall, wildly whipping the bomb with his Stetson hat!

The defense department is interested in the heat seeking capabilities of the jewel beetles that are also euphorically attracted to their destiny. These beetles have an interesting heat-seeking capability. When they detect a forest fire they flock to the scene. The females prefer to lay their eggs in burned tree bark where they are protected from the toxic chemicals in secretions a healthy tree would use in its defense. Knowing this, the males arrive in droves to assist!

These beetles have two targeting capabilities. They can locate a fire from chemicals in its smoke from a distance of 50 miles and they have tiny pits on their thorax that are sensitive to infrared radiation (heat) similar to those of a pit viper. Heat seeking missiles require complex and bulky cooling devices that nature has found a solution for in the jewel beetles! That said, there are also potential medical and sensory uses that may be derived from the study of these beetles. Sensors may be developed for use in forest to provide advance warning of forest fires and patients may some day benefit from technology developed from the jewel beetle to monitor their temperature.



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